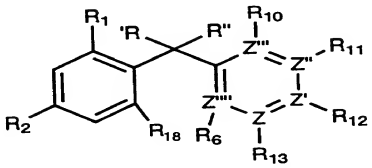
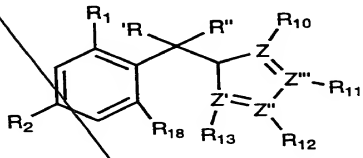
We claim:

1. A compound having the formula:



or



wherein

R_1 and R_2, each independently, represent hydrogen or lower alkyl or acyl having 1-4 carbon atoms;

R′ and R″ represent hydrogen, lower alkyl or acyl having 1-4 carbon atoms, OH, alkoxy having 1-4 carbon atoms, thiol or thio ether, or amino,

or R′ or R″ taken together form an oxo (keto), methano, thioketo, HO-N=, NC-N=, $(R_7R_8)N$-N=, $R_{17}O$-N=, $R_{17}N$=, epoxy, cyclopropyl, or cycloalkyl group and wherein the epoxy, cyclopropyl, and cycloalkyl groups can be substituted with lower alkyl having 1-4 carbons or halogen;

R_6, R_{10}, R_{11}, R_{12}, R_{13} each independently represent hydrogen, a lower alkyl having 1-4 carbons, halogen, nitro, OR_7, SR_7, NR_7R_8 or $(CF)_nCF_3$, and exist only if the Z, Z′, Z″, Z′″, or Z″″ from which it originates is C, or each independently represent hydrogen or a lower alkyl having 1-4 carbons if the Z, Z′, Z″, Z′″, or Z″″ from

which it originates is N, and where one of R_6, R_{10}, R_{11}, R_{12} or R_{13} is X;

R_7 represents hydrogen or a lower alkyl having 1-6 carbons;

R_8 represents hydrogen or a lower alkyl having 1-6 carbons;

R_9 represents a lower alkyl having 1-4 carbons, phenyl, aromatic alkyl, or q-hydroxyphenyl, q-bromophenyl, q-chlorophenyl, q-florophenyl, or q-iodophenyl, where q=2-4;

R_{17} represents hydrogen, lower alkyl having 1-8 carbons, alkenyl (including halogen, acyl, OR_7 and SR_7 substituted alkenes), R_9, alkyl carboxylic acid (including halogen, acyl, OR_7 and SR_7 substituted alkyls), alkenyl carboxylic acid (including halogen, acyl, OR_7 and SR_7 substituted alkenes), alkyl amines (including halogen, acyl, OR_7 and SR_7 substituted alkyls), and alkenyl amines (including halogen, acryl, OR_7 and SR_7 substituted alkenes);

R_{18} represents hydrogen, a lower alkyl having 1-4 carbons, halogan, nitro, OR_7, SR_7, NR_7R_8, or $(CF)_n CF_3$;

X is COOH, tetrazole, PO_3H, SO_3H, CHO, CH_2OH, $CONH_2$, COSH, $COOR_9$, $COSR_9$, $CONHR_9$, or COOW where W is a pharmaceutically acceptable salt, and where X can originate from any C or N on the ring;

Z, Z', Z", Z"' and Z"", each independently, represent C, S, O, N, or a pharmaceutically acceptable salt, but is not O or S if attached by a double bond to another such Z or if attached to another such Z which is O or S, and is not N if attached by a ~~single bond to another such Z which is N, and~~

~~n = 0-3,~~

2. A compound of claim 1 wherein said compound selectively activates Retinoid X Receptors in preference to Retinoic Acid Receptors.

3. A compound selected from the group consisting of 4-[1-(2-methyl-4-t-butylphenyl)ethenyl] benzoic acid,

4-[1-(2-methyl-4-t-butylphenyl)cyclopropyl] benzoic acid,

4-[(2-methyl-4-t-butylphenyl)carbonyl] benzoic acid,

4-[(2-methyl-4-t-butylphenyl)carbonyl] benzoic acid oxime, and

4-[1-(2-methyl-4-t-butylphenyl)carbonyl] benzoic acid methyloxime.

4. A pharmaceutical composition comprising in a pharmaceutically acceptable vehicle suitable for enteral, parenteral, or topical administration, one or more compound of claim 1.

5. A method for modulating a process mediated by one or more Retinoid X Receptors, said method comprising causing said process to be conducted in the presence of at least one compound as set forth in claim 1.

6. A method according to claim 5 wherein said process is the *in vivo* modulation of lipid metabolism, *in vivo* modulation of skin-related processes, *in vivo* modulation of malignant cell development, *in vivo* modulation of premalignant lesions, or *in vivo* modulation of programmed cell death.

7. A method according to claim 5 wherein said process is in *in vivo* or *in vitro* cellular growth and differentiation, or *in vivo* limb morphogenesis.

8. A method for modulating a process mediated by one or more Retinoid X Receptors, said method comprising administering to

a mammalian subject an amount, effective to modulate said process mediated by said one or more Retinoid X Receptors, of one or more compound of claim 1.

9. A method for treating a mammalian subject requiring Retinoid X Receptor therapy comprising administering to such subject a pharmaceutically effective amount of one or more compounds as set forth in claim 1.

10. A method for increasing plasma concentrations of high density lipoprotein in a mammalian subject comprising administering to such subject a pharmaceutically effective amount of one or more compounds as set forth in claim 1.

11. A method for modulating a process mediated by intracellular receptors, said method comprising causing said process to be conducted in the presence of a composition comprising a first compound as set forth in claim 1 which selectively activates Retinoid X Receptors in preference to Retinoid Acid Receptors, in combination with a second compound which activates one or more intracellular receptors other than Retinoid X Receptors, and wherein the physiological effect in mammals produced by said composition at a given concentration is greater than the additive effect achieved by utilizing each said compound alone at ~~said concentration~~.

add E1